# Before the **Federal Communications Commission** Washington, D.C. 20554

In the Matter of	)	
Mobile Satellite Ventures Subsidiary LLC.	)	
•	)	File No. SES-MOD-19990727-0130
To Modify Blanket License Authorization to	)	
Operate up to an additional 36,900 Mobile Earth	)	File No. SES-STA-20000703-01105
Terminals in the L-Band and Request for Special	)	
Temporary Authority (E900081)	)	

### MEMORANDUM OPINION AND ORDER

**Adopted:** June 28, 2002 Released: July 2, 2002

By the Deputy Chief, Satellite Division, International Bureau:

#### I. Introduction

1. By this Order, we grant Mobile Satellite Ventures Subsidiary LLC (MSV)<sup>1</sup> regular authority, for a term of two years, to operate the 33,100 half-duplex mobile earth terminals (METs) that it is currently operating on a temporary basis in the lower L-band.<sup>2</sup> In addition, we dismiss MSV's referenced request for Special Temporary Authority (STA) to operate up to 5.000 additional METs in the lower L-band.

#### II. **Background**

2. MSV is currently authorized to operate 33,100 METs in the lower L-band, on a temporary basis.<sup>3</sup> MSV says it is seeking an additional 36,900 METs, to expand its authority to operate up to 70,000

<sup>&</sup>lt;sup>1</sup> At the time the application and the request for Special Temporary Authority were filed MSV was known as AMSC Subsidiary Corporation.

<sup>&</sup>lt;sup>2</sup> The "L-band" is a general designation for frequencies from 1 to 2 GHz. In this *Order and Authorization*, however, the term "L-band" denotes only the 1545-1559 MHz and 1646.5-1660.5 MHz frequency band ("upper L-band") and the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands ("lower L-band"). The United States is the only country that distinguishes between the "upper" and "lower" L-band.

<sup>&</sup>lt;sup>3</sup>On August 1,1995, MSV was granted authority to operate up to 30,000 METs in the upper L-band, and at the same time authorized to operate 3,100 of these METs in the lower L-band in half-duplex mode. See AMSC Subsidiary Corporation, Order and Authorization, 10 FCC Red 10458 (1995), (Lower L-band Order). On August 4, 1995, MSV was authorized to increase the number of half-duplex METs operating in the lower L-band to 15,100. See AMSC Subsidiary Corporation, Order on Reconsideration, 11 FCC Rcd 5527 (1995). MSV recounts that subsequently, on November 22, 1996, the Commission granted its request (File No. 179-DSE-MP/L-97), allowing MSV to acquire an additional 18,000 half-duplex METs from Rockwell International Corporation. See MSV Request for Modification of Blanket License at 3.

half-duplex METs in order to meet the growing need for its two data services: mobile messaging service and multi-mode messaging service. MSV asserts that grant of both its request for STA and its underlying application for modification of its blanket license to operate the additional 36,900 METs would be consistent with the Commission's rules on priority and preemptive access and its spectrum management policy in the L-band. Further, MSV contends that the additional METs would not result in interference to any other operator.<sup>4</sup>

3. No objections to the applications were filed. The National Telecommunications and Information Administration (NTIA) submitted comments that did not oppose grant of MSV's modification application, subject to certain conditions.

### III. Discussion

- 4. Priority and Preemptive Access. Footnote US315 to the Table of Allocations to Section 2.106 of the Commission's rules states that lower L-band mobile satellite service (MSS) systems may not interfere with maritime mobile-satellite service (MMSS) distress and safety communications that also operate in these frequencies.<sup>5</sup> Footnote US315 protects MMSS distress and safety communications, such as Global Maritime Distress Satellite Service (GMDSS), domestically by providing priority access and real-time preemptive capability for distress and safety communications. In the Lower L-Band Report and Order, 6 the Commission observed that full compliance with Footnote US315 was not possible for METs operating in half-duplex mode because the half-duplex transmission cannot be interrupted once it has started. The Commission noted that, over the past two years, the International Bureau has waived full compliance with Footnote US315 because experience has shown that, with appropriate restraints and due to the short duration of half-duplex transmissions, the integrity of maritime safety and distress communications can be maintained. Given the importance of safety-related communications, the Commission, however, declined to waive Footnote US315 for half-duplex METs in the lower L-band, on a permanent basis. Rather, it stated that requests for operational authority subject to waiver of Footnote US315 would continue to be considered on a case-by-case basis. The Commission further noted that the NTIA has indicated that if a terminal is capable of, among other things, ceasing transmissions and inhibiting further transmissions within one second, that terminal would be considered to meet the real time preemption requirements.<sup>7</sup>
- 5. MSV concedes that its terminals, while operating in half-duplex mode, cannot achieve the priority and preemptive access to maritime safety services required by Footnote US315 and requests that a temporary waiver be granted. MSV points out that in 1995, the Commission found the preemptive capability of the half-duplex METs of MSV's system would not adversely affect maritime safety communications. MSV alleges that operation of additional METs will not interfere with other systems.

<sup>6</sup> In the Matter of Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, Report and Order, 17 FCC Rcd 2704 (2002) (Lower L-band Report and Order).

<sup>&</sup>lt;sup>4</sup> See MSV Request for Modification of Blanket Authorization at 1-5.

<sup>&</sup>lt;sup>5</sup> 47 C.F.R. § 2.106.

<sup>&</sup>lt;sup>7</sup> See Lower L-band Report and Order, 17 FCC Rcd at ¶¶ 30-41 (2002).

<sup>&</sup>lt;sup>8</sup>See MSV Request for Modification of Blanket Authorization at 4, citing the *Lower L-band Order*, 10 FCC Rcd 10458.

In addition, MSV acknowledges that its METs must comply with the Commission's out-of-band emission requirements for mobile terminals operating in the L-band.<sup>9</sup>

- 6. In granting waivers of Footnote US315 in 1995, the Commission anticipated a substantial growth in maritime mobile satellite service traffic and a corresponding increase in the possibility of harmful interference to the then nascent GMDSS. However, because of the apparent robustness of the maritime distress and safety service, the Commission subsequently found that the capability of MSV's half-duplex terminals to cease transmitting and to make their spectrum available to GMDSS in less than 48 seconds, and in most cases in less than 12 seconds, would provide sufficient distress and safety communications priority to comply with the intent of Footnote US315. Since 1995, the growth of MSS has increased the likelihood of possible harmful interference with MMSS distress and safety communications in the lower L-band. As a result, the NTIA is concerned that the possible likelihood of interference will increase as more MMSS terminals are placed into operation. For these reasons and after consultation with the NTIA, we decline to more than double the number of half-duplex METs MSV is currently authorized to operate in the lower L-band.
- 7. Consistent with the NTIA's comments, we grant MSV regular authority for a term of two years with no increase in the number of METs beyond the number it is currently authorized. <sup>11</sup> This balances MSV's need to accommodate customer demand for mobile data services and the need to ensure the integrity of maritime safety communications. We encourage MSV to continue to work to bring its half-duplex METs into full compliance with Footnote US315.

## IV. Conclusion and Ordering Clauses

8. Accordingly, IT IS ORDERED that Application File No.SES-MOD-19990727-01301 IS GRANTED to the extent described herein, and Mobile Satellite Ventures Subsidiary LLC IS AUTHORIZED to operate its currently authorized 33,100 half-duplex METs, on a common carrier basis, in the lower L frequency bands 1626.5-1645.5 MHz and 1530-1544 MHz through the AMSC-1 space station at 101° W.L. to provide mobile satellite service in the United States for a license term of two years, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules, subject to the conditions set forth below.

<sup>&</sup>lt;sup>9</sup> These requirements are set forth in Section 25.216 of the Commission's rules. See Amendment of Part 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements; Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band, Report and Order and Further Notice of Proposed Rulemaking, FCC 02-134 (rel. May 14, 2002).

<sup>&</sup>lt;sup>10</sup> See Lower L-band Order, 10 FCC Rcd at 10460.

<sup>&</sup>lt;sup>11</sup> See Letter from Jim Vorhies, Acting Program Manager, Spectrum Plans, NTIA, to Thomas S. Tycz, Chief, Satellite Division, International Bureau, FCC, dated May 24, 2002. In light of our action here, MSV's request for STA is effectively rendered moot.

- 9. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC's MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.
- 10. IT IS FURTHER ORDERED that, in the absence of a continuing annual operator-to-operator coordination agreement, Mobile Satellite Ventures Subsidiary LLC's operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Mobile Satellite Ventures Subsidiary LLC shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Mobile Satellite Ventures Subsidiary LLC must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. MSV, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.
- 11. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC's METs shall comply with the out-of-band emission limits set forth in Section 25.216 of the Commission's rules. *See Out-of-Band Emission Order*, FCC 02-34 (rel. May 14, 2002).
- 12. IT IS FURTHER ORDERED that this authorization does not permit Mobile Satellite Ventures Subsidiary, LLC to provide common carrier service outside of the United States. If Mobile Satellite Ventures Subsidiary, LLC wishes to provide such service, it must obtain authority pursuant to Section 214 of the Communication Act, 47 U.S.C. § 214, before doing so.
- 13. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC IS GRANTED a waiver to the preemption and real-time access requirements of US Footnote 315 to Section 2.106 of the Commission's rules, 47 C.F.R. § 2.106, and ITU Radio Regulation 5.357, for the term of the license.
- 14. IT IS FURTHER ORDERED that that Mobile Satellite Ventures Subsidiary LLC's operation the 33,100 METs is on a secondary basis to safety and distress communications of those stations operating in the Global Maritime Distress Satellite Service.
- 15. IT IS FURTHER ORDERED that Request for Special Temporary Authority File No. SES-STA-20000703-01105 IS DISMISSED.
- 16. IT IS FURTHER ORDERED that this license shall not vest in the licensee any right to operate Earth stations or use the assigned frequencies beyond the term thereof or in any manner other than authorized herein, and neither the licensee nor the rights granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act.
- 17. IT IS FURTHER ORDERED that the license term for the METs that are authorized by the *Order and Authorization* be for two years.

- 18. This Order is issued pursuant to Section 0.216 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.
- 19. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC be afforded thirty day to decline this authorization. Failure to respond within this period will constitute formal acceptance of the authorization.

## FEDERAL COMMUNICATIONS COMMISION

Cassandra C. Thomas Deputy Chief, Satellite Division